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(54) Washing machine

#### Abstract

The present invention relates to a washing machine for removing dirt from clothes, realized in a way to drive the washing-dewatering tank

depending on the number of revolutions and circulate washing water, to control the revolutions of the washing-dewatering tank while monitoring the electric current flowing through the motor (driving means), and to apply a fixed torque to the washing-dewatering tank by keeping the torque of the motor constant, to enable to spray an about constant volume of water in the washing-dewatering tank even in case there is some difference in the volume of clothes or the volume of washing water in the washing-dewatering tank.

This washing machine is constructed by comprising a cleaning process for driving a washing-dewatering tank (2) installed in a way to freely turn in an outer tank (1) by means of a motor (5), and spraying washing water in the washing-dewatering tank (2) from between the outer tank (1) and the washing-dewatering tank (2) with the revolution of the washing-dewatering tank (2), so as to control the electric current value of the motor (5) to be about constant.

#### Brief Description of the Drawings

Fig. 1 is a longitudinal sectional view of the washing machine in the first embodiment of the present invention.

Fig. 2 is a block circuit diagram indicating the washing machine above.

Fig. 3 is an operation timing chart of the inverter of the washing machine above.

Fig. 4 is an operation flow chart of main part of the washing machine above.

Fig. 5 (a) is a relative characteristic chart of the volume of clothes and the volume of circulation water at a large volume of washing water in the washing machine above.

Fig. 5 (b) is a relative characteristic chart of the volume of clothes and the volume of circulation water at a medium volume of washing water in the washing machine above.

Fig. 6 is an operation timing chart of main part of the washing machine above.

Fig. 7 is a block circuit diagram of the washing machine in the second embodiment of the present invention.

Fig. 8 is a front elevation of the operation display unit of the washing machine above.

Fig. 9 is an operation flow chart of main part of the washing machine in the third embodiment of the present invention.

Fig. 10 is a longitudinal sectional view of a conventional washing machine.

Fig. 11 is a block circuit diagram of the washing machine above.

Description of reference numerals and signs for main parts in the drawings:

- 1: Outer tank
- 2: Washing-dewatering tank
- 3: Motor (driving means)